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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,293	12/03/2001	William B. Priester	56922.US	2709

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EXAMINER	
FOREMAN, JONATHAN M	

ART UNIT	PAPER NUMBER
3736	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,293	PRIESTER ET AL.	
	Examiner	Art Unit	
	Jonathan ML Foreman	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 10-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3-7 and 14-28* is/are allowed.

6)☒ Claim(s) *1,2 and 10-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2 and 10 -12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,754,121 to Ward et al. in view of U.S. Patent No. 4,660,829 to Whiteneir and U.S. Patent No. 5,474,088 to Zaharkin et al.

3. In regards to claims 1 and 10 – 12 Ward et al. discloses a joint angle identification system (10) including a first arm member (19) having a proximal and distal end for attachment to a first body part; a second arm member (20) for attachment to a second body part, the second arm having a proximal end and a distal end, the distal end of the second am member is pivotally coupled to the proximal end of the first arm member; a joint angle variation sensor comprising at least one potentiometer (22) for providing at least one electrical characteristic which varies based on variation in a joint angle of the first arm member relative to the second arm member (Col. 6, lines 46 – 52), where the joint angel is variable over an angular range which includes a first and second angle; a biofeedback circuit operable to generate a first feedback audio signal using a buzzer (Col. 9, lines 11 – 13) when the electrical characteristic indicates the joint angle is less than or equal to the first angle, operable to generate a second feedback audio signal using a buzzer when the electrical characteristic indicates the joint angle being less than the second angle greater than the first angle (Col. 5, lines 50 – 60; Col. 9, lines 58 – 64). However, Ward et al. fails to disclose the first and second feedback

signals having a first and second audio frequency that are different from one another. Nor does Ward et al. disclose a digital angle display for visually displaying a joint angle value. Whiteneir discloses a joint angle identification system having a biofeedback circuit operable to generate a first feedback audio signal when the electrical characteristic indicates the joint angle is less than or equal to the first angle, operable to generate a second feedback audio signal when the electrical characteristic indicates the joint angle being less than the second angle greater than the first angle, where the first and second feedback signals comprise a first and second audio frequency that are different from one another (Col. 4, line 66 – Col. 5, line 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system as disclosed by Ward et al. to include an audio output circuit and first and second feedback audio signal having a first and second audio frequency that are different from one another as taught by Whiteneir in order to indicate to the user the direction in which he/she traveled relative to a desired "center" (Col. 5, lines 11 – 15). Zaharkin et al. discloses a joint angle identification system including a digital angle display (60) for visually displaying a joint angle value based on the electrical characteristic (Col. 4, line 59). It would have been obvious to one having ordinary skill in the art to modify the system as disclosed by Ward et al. to include a digital angle display as taught by Zaharkin et al. in order to allow the user to view menu choice options, relative angular position of the arm members, average angular velocity of moving lib members about a joint, or angular displacement of a limb about a joint (Col. 4, lines 54 – 61).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,754,121 to Ward et al. in view of U.S. Patent No. 4,660,829 to Whiteneir and U.S. Patent No. 5,474,088 to Zaharkin et al. as applied to claim 12 above, and further in view of U.S. Patent Application Publication No. 2003/0088196 to Steve.

In regards to claim 13, Ward et al. in view of Whiteneir and Zaharkin et al. disclose a programmable feedback system but fail to disclose including a microphone. Steve discloses a programmable feedback system having a microphone [0027]. It would have been obvious to one having ordinary skill in the art to modify the system as disclosed by Ward et al. in view of Sasser and Fine to include a microphone as taught by Steve so voice activation can be used to set up the device [0027].

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 3 – 7 and 14 - 28 are allowed. No prior art teaches or suggests in combination a system as claimed including a first arm member with a first and second prong portion; a second arm member; a first potentiometer disposed between the second arm member and the first prong of the first member; and a second potentiometer disposed between the second arm member and the first prong member. No prior art teaches or suggests a method including generating an audio indication signal; generating an audio annotation signal; recording the audio angle indication signal on a first channel and recording the audio annotation signal on a second channel; accessing the above signals; operating on the audio angle signal to derive a joint angle; displaying a joint angle; and providing an audible rendition of the audio annotation signal.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (703) 305-5390. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703)308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMLF

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